THE COPERNICUS CLIMATE CHANGE SERVICE: From a Proof-of-Concept to a Fully Operational Service

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The Copernicus Climate Change Service (C3S), one of the six core Services of the Copernicus programme, enters its fourth year of development. 2018 has been a critical year for C3S as a transition from a prototyping phase into a full operational Service.

C3S benefits from a strong engagement of the scientific community in Europe and worldwide, which provides the underpinning science that the Service requires to ensure quality assured and state-of-the-art climate products, information, and services.

A wide variety of products is now routinely made available and accessed by thousands of users. A unique and strong point of C3S is the focus on delivering operationally high-quality and consistent data, via its distributed Climate Data Store. C3S is user-driven and the evolution of its portfolio (products and services) reflects the evolution of the user needs.

A prime user of the Service is the European Commission itself. C3S strives to support policy makers and public authorities at European level and beyond, by providing the environmental information they need to support their policies and legislation, which becomes critically important in view of the Paris Agreement, the UNFCCC Sustainable development Goals, the Sendai Framework for Disaster Risk Reduction, etc.
In addition, by providing access not only to high quality data but also tools, guidance and compute facilities to handle and transform these data, C3S ambitions to be an enabler for downstream climate service applications tailored to various local and sectoral needs.

This presentation will provide an overview of the state-of-play of C3S and its main components: from ECV (Essential Climate Variable) products, global reanalyses, seasonal forecasts, climate scenarios to sectoral climate impact indicators, as well as the processes put in place for the quality assurance of these elements. Last but not least, the presentation will cover the foreseen evolution of the Service until and beyond 2020.